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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/605,055	09/05/2003	Chih-Chin Chang	10658-US-PA	2054	
31561	7590 01/12/2006		EXAMINER		
JIANQ CH	JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE			TRINH, MINH N	
7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 TAIWAN			ART UNIT	PAPER NUMBER	
			3729 DATE MAILED: 01/12/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant/a)	,			
	Application No.	Applicant(s)				
	10/605,055	CHANG ET AL.				
Office Action Summary	Examiner	Art Unit	_			
	Minh Trinh	3729				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v. - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be to will apply and will expire SIX (6) MONTHS from the application to become ABANDON	DN. timely filed on the mailing date of this communication. NED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>03 N</u>	ovember 2005					
	<u> </u>					
· <u> </u>	-					
closed in accordance with the practice under E						
Disposition of Claims						
4)⊠ Claim(s) <u>1-10</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-10</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	er.					
10)☐ The drawing(s) filed on is/are: a)☐ acco	epted or b) objected to by the	Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. So	ee 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	• • • • • • • • • • • • • • • • • • • •	• , ,				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Offic	e Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of:	priority under 35 U.S.C. § 119(a	a)-(d) or (f).				
 Certified copies of the priority documents 	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents	2. Certified copies of the priority documents have been received in Application No					
Copies of the certified copies of the prior	-	ved in this National Stage				
application from the International Bureau	, , , , , , , , , , , , , , , , , , , ,					
* See the attached detailed Office action for a list	of the certified copies not receiv	red.				
Attachment(s)	4) 🔲 Interview Summar	(DTO 442)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail [
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal 6) Other:	Patent Application (PTO-152)				

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-10 in the reply filed on 11/03/05 is acknowledged. Non elected claims 11-17 have been cancelled.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: "Mask for fabricating a contact" or the like.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al (6,905,621) in view of Lee et al (6,653,028).

Ho discloses a mask for fabricating contacts comprising a contact pattern having a photo exposure region; and an edge pattern at the edge of the contact pattern. (see Fig. 2a, 2d or 3a, which represents a number of related masks having the configuration requirements set forth above i.e., Fig. 2 shows contact forming mask 32 includes exposure region 33 and edge pattern 34). Ho is in silent about whether the edge pattern is a half tone region. Regarding to this, it would have been an obvious matter of design choice to choose any desired materials for use as the edge of the contact pattern since applicant has not disclosed that the edge pattern is a half tone region is a critical, patentably distinguishing feature and it appears that the invention would perform equally well with the edge pattern is a PMS as discussed in col. 5, lines 1-5 and col. 6, lines 60-67 of the Ho's reference.

Further, Lee et al discloses exposure region by half tone (see Figs. 2A-2B and their discussion at col. 1, lines 64-67 and col. 2, lines 1-6). Therefore, it would have been obvious to one ordinary having skill in the art at the time of the invention was made to employ the Lee's teaching as described above onto the invention of Ho in order to form a desired mask having the half tone configuration regions therefrom.

5. Claims 2-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al (6,905,621) in view of Lee et al (6,653,028) as applied above and further in view of Blatchford, Jr. et al (6,680,150).

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Ho or Lee et al as modified and applied above do not teach the saw tooth edge pattern and its lining configurations recited in each of claims 2-3. Blatchford, Jr. et al teach that (see various related Figs. 1-5). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to utilize the Blatchford's teaching of saw tooth pattern as shown in their Figs 1-5 onto the modified invention of Ho/ Lee et al as so to form a contact pattern having a particular shape, the motivation for the combination can be found in col. 6, lines 39-44 of the Blatchford's reference.

Limitations of claims 4-10 are similar to that as discussed above.

Furthermore, regarding the edge pattern in term of its shape as recited in claims 2-10, it would have been an obvious matter of design choice to modify the edge pattern including the shape as recited in these claims, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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